

REMARKS

Many of the claims have been amended to more clearly set forth Applicant's invention. Additional claims have been added to cover disclosed but unclaimed subject matter.

Claim Rejections

35 U.S.C. 112)

Claim 2 is rejected under 35 USC 112, 2nd paragraph as being indefinite for failing to particularly point out and claim the subject matter. An appropriate spelling correction amendment has been made to change "bales" to "baffles." This is believed to overcome such rejection.

35 U.S.C. 103(a)

Claims 1-3 were rejected under 35 U.S.C. 103(a) as being unpatentable over Butler et al. EP 0724906) Applicants respectfully traverse these rejections.

The Examiner admits that the EP 0724906 art does not teach adding at least one baffle to the top half of the displacement cylinder of the reactor. However, the Examiner cites Col. 6, lines 21-33 of the EP Specification for the proposition that the EP somehow contains a "clear teaching and suggestion" to modify the flow through the reactor in order to optimize the radial flow conditions through the reactor, and that the EP art somehow teaches and suggests modification of reactor by adding "at least one baffle to the top half of the displacement cylinder" (see Office Action at Page 3, last 5 lines of page).

Applicants however respectfully show that even a cursory review of the Figures of EP 0724906 undisputedly show that the baffles 20 are formed on the outer wall of the catalyst bed 19, with the baffles extending

into the annular area 22 between the catalyst bed and the vessel 11. See e.g. Col. 3, lines 8-10; lines 31-32. See e.g. Fig. 1-Fig. 7 of EP 0724906, attached as ***Exhibit A***. There is also no suggestion or teaching in the EP specification to place the baffles anywhere but in the catalyst bed.

In stark contrast, Applicant's claimed invention (as set forth in the amended claims) is directed to a retrofitted gas flow catalyst bed reactor where the baffle (e.g. 30, 31, 32) is added to the outside of the top half of the displacement cylinder (12). (see Claim 1 et. seq.); see ***Exhibit B***. Further, an existing reactor can be modified without disassembling the reactor (see Claim 10 et. seq.; Claim 17 et. seq.). In an embodiment, the displacement cylinder is of a sufficient width for cutting a man way into the top to thereby allow retrofitting of the baffles from an inside of the displacement cylinder (see Claim 11).

In an aspect at least two baffles are added to the top half of the displacement cylinder of the reactor to allow more uniform fluid flow through the reactor (see Claim 13), and the addition of the baffles cause a minimal increase in pressure drop and a maximum effect on fluid flow normalization.

In view of the foregoing, there is no teaching or suggestion in the cited EP that makes Applicants' invention obvious. Similarly, Applicants respectfully submit that there is no teaching or suggestion to modify the EP prior art references in order to arrive at Applicant's claimed invention that requires that baffles be attached to the displacement vessel and that this be accomplished without disassembling the reactor.

A determination of patentability under 35 U.S.C. 103 should be made upon the facts of the particular case in view of the totality of the circumstances. See, e.g., *In re Dillon*, 919 F.2d 688, 692-93, 16 USPQ2d 1897, 1901 (Fed. Cir. 1990) (in banc). The Applicants' claimed invention can be made only with the benefit of a hindsight after reviewing applicants'

disclosure, and hindsight reconstruction is impermissible. As such, no prima facie case under 35 U.S.C. §103(a) has been made and Applicants respectfully submit that such amended claims are patentable.

For the same reasons, Claims 17 et seq. set forth a novel method for retrofitting the assembly of Claim 1 for ethylbenzene dehydrogenation that are also non-obvious and patentable.

CONCLUSION

In conclusion, Applicants respectfully submit that the rejections have been overcome and that the claims are in condition for allowance. As such, Applicants respectfully request the same.

This is intended as a full and complete response to the Office Action. In response to the Office Action dated October 4, 2007, having a shortened statutory period for response set to expire on January 4, 2008, Applicants file this Response and Amendment and a Request for a Two (2) Month Extension of Time, along with the extra claim fees. In the event additional fees are due in conjunction with the response, the Commissioner is hereby authorized to deduct such fees from USPTO deposit account No. 03-3345, or to credit any overpayments to such account.

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Respectfully submitted,

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